GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF MATERIALS AND RESEARCH

Standard Operating Procedure (SOP) 17—Physical & Chemical Acceptance of Miscellaneous Construction Items

I. General

As an aid to construction and maintenance personnel, the <u>Office of Materials and Research (OMR)</u> maintains a <u>Qualified Products Manual</u>. This Standard Operating Procedure provides guidelines to establish Qualified Products for use with miscellaneous construction items and governs the following <u>Qualified Products Lists</u>, which are included in this manual:

QPL 15	Epoxy Resin Adhesives	QPL 47	Geocomposite Wall Drains
QPL 18	Special Protective Coatings	QPL 49	Permanent Soil Reinforcing Mat
QPL 19	Bar Supports	QPL 58	Filter Fabric Adhesives
QPL 20	Preformed Joint Fillers	QPL 62	Organic & Synthetic Material Fiber Blanket
QPL 21	Pipe Joint Sealers and Gaskets for Concrete Pipe	QPL 63	Ground Mounted Breakaway Sign Supports
<u>QPL 22</u>	Waterproofing Membrane Material	QPL 66	Silicone Joint Sealants
QPL 24	Bituminous Treated Roving	QPL 68	Low Dusting Blast Cleaning Abrasives
QPL 25	Wood Fiber Mulch	QPL 69	Flexible Delineator Posts
<u>QPL 27</u>	Rapid Setting Patching Materials	QPL 72	Guy Wire / Span Cable
QPL 28	Filter Fabrics	QPL 73	Waterborne Bridge Paint Systems
QPL 29	Reflective Sheeting	QPL 74	Preformed Plastic Markings
QPL 31	Manhole Steps	QPL 75	Polyurethane Sealant for Inductive Loops
QPL 32	Soil Sterilants	<u>QPL 76</u>	Raised Pavement Markers and Channel Markers
QPL 33	Tackifiers	QPL 78	Traffic Signal Pull and Junction Boxes
QPL 34	Work Zone Traffic Control Devices	QPL 79	Portable Arrow Boards
QPL 35	Drive Type Galvanized Steel Sign Posts	QPL 82	Portable Changeable Message Signs
QPL 36	Silt Fence Fabric and Type C Systems	QPL 83	Center Mount Reflector Delineators

QPL 38	Epoxy Powders for Coating Reinforcing Bars and Plastic Coated Tie Wire	QPL 84	Anionic Polyacrylamide Materials
QPL 40	Pavement Reinforcement Fabric	QPL 87	Detectable Warning Surfaces
QPL 46	Traffic Markings Products		

Products that appear on these lists have been evaluated by the Office of Materials and Research and have proven their capability of meeting the appropriate Georgia Department of Transportation Specifications. Any of these products may be used without sampling or pre-testing provided the field engineer determines the product is uncontaminated and /or undamaged. However, products normally shipped as packaged units such as epoxy adhesives, special surface coatings for concrete surfaces, etc., may not be used if the units have been partially expended prior to arrival on the project. The field engineer must ascertain that the construction item is the same material identified on the appropriate Qualified Products List and will acknowledge receipt of these items in the project diary or as required by the Construction Manual.

It shall be the responsibility of the New Products Evaluation Engineer to monitor products covered by SOP 17— Physical & Chemical. The Office of Materials and Research will update the Qualified Products Manual a minimum of every twelve months. Representatives from the Office of Materials and Research, at unscheduled times, may visit the producer's plant or warehouse and/or construction or maintenance projects to obtain random samples of items covered by this SOP. Products that consistently produce test results that significantly vary from those established by the manufacturer and verified by the Office of Materials and Research will be removed from the Qualified Products Manual. Products that meet the current requirements of the Specifications but do not perform satisfactorily in the field will be removed from the Qualified Products Manual. Products that meet current requirements of the Specifications but were not submitted for annual evaluation upon request by the Department will be removed from the Qualified Products Manual. Removal from the Manual will prohibit the use of the product in Department of Transportation work until the acceptability of the product is re-established. Products that have not been used in Georgia Department of Transportation Construction or Maintenance work for a period of twelve months may, at the Department's discretion, be removed from the Qualified Products Manual. The Department reserves the right to limit the number of products for each type material from any manufacturer.

II. Requirements

A. Manufacturer/Producer Requirements

Manufacturers and/or Producers must adhere to the following requirements:

Samples may be submitted for Initial Evaluation at any time. Products covered by SOP 17—Physical & Chemical, currently approved by the Department and listed in the Departments Qualified Products Manual must be submitted for Annual Evaluation. Annual samples must be submitted to the Office of Materials and Research per letter request.

When submitting a sample, the Office of Materials and Research requires the following:

- 1. A Product Evaluation Form must be completed, listing each sample submitted for evaluation.
- 2. A Manufacturer Safety Data Sheet (MSDS) should accompany the sample when applicable. (See Section IIB)
- 3. Warranty letter as described in <u>Section II-C</u>.
- 4. The sample and required documentation should be sent to the following address:

Georgia Department of Transportation
Office of Materials and Research
15 Kennedy Drive
Forest Park, GA 30297-2599

Attn: Physical & Chemical Branch

B. Independent Lab Results

Test results from a private lab are required on some items before the <u>Office of Materials and Research</u> will begin its evaluation. As a matter of information, any available test results, product data sheets, MSDS and independent lab evaluation and certification should be furnished when submitting a product for initial evaluation.

C. Annual Warranty

The manufacturer or producer must submit an annual warranty for each product before being added to the Qualified Products Manual. The warranty shall be submitted on company letterhead and contain the following: Subject line with QPL # and title, appropriate QPL warranty statement from Section III through Section XLI followed by additional statement below, signed by a person legally responsible to bind the company, and NOTARIZED.

The Following Additional Warranty Shall Be Included As The Latter Part Of Every Warranty:

"We further warrant that material furnished to State of Georgia projects will be replaced without cost to the purchaser and State of Georgia when found not in conformity with any of the specified requirements. We accept full responsibility for determining the governing Specification for each order, provided we are given notice of revised Specifications, and we warrant that the material currently being furnished is identical in formulation, composition, and properties as the material originally submitted for source approval."

D. Product Identification

Brand name, type, or lot or batch number, date of manufacture, and any other pertinent information must identify submitted products. The manufacturer will be expected to conduct sufficient tests and maintain product control records to verify that production is adequate to assure specification compliance. It will be required that the manufacturer notifies the Office of Materials and Research, in writing, of any change in formulation or composition of any of their products in the Qualified Products Manual and submit samples for re-evaluation.

E. Production Quality Control Plan

Manufacturers must submit a copy of a production quality control plan for each of their products for review by the Office of Materials and Research.

F. Product Labels

Product labels must be unique to the company wishing to list their products in the <u>Qualified Products Manual</u>; therefore, companies will not be allowed to list product labels other than their own. The Department will not evaluate or list the same-labeled product in the <u>Qualified Products Lists</u> for multiple distributors, manufacturers or producers, unless product is privately labeled and warranted.

G. Initial and Annual Evaluations

Submittal of products for Initial Evaluation or Annual Evaluation must be in accordance with this Standard Operating Procedure. The Department will not evaluate any improperly submitted products.

III. (QPL 15) Epoxy Resin Adhesives

Epoxy Resin Adhesives shall meet the current requirements and labeling instructions of Section 886 of the Georgia Department of Transportation Specifications. Each container must be identified by the type and contain complete mixing instructions and other pertinent information as required by Section 886.

A. Sample Requirements

1. Initial Evaluation 1 pint (475 ml) of each component and / or 1 cartridge

2. Annual Evaluation 1 pint (475 ml) of each component and / or 1 cartridge

The Department will not test Epoxy Resin Adhesives for multiple Epoxy Types. Please use the following excerpt from Subsection 886.2.01 as a guide.

Туре	Description
I-R	Rapid setting marker adhesive for bonding raised pavement markers to pavement.
I-S	Standard setting marker adhesive for bonding raised pavement markers to pavements.
II	Epoxy adhesive for bonding plastic concrete to hardened concrete.
III	Epoxy adhesive for bonding hardened concrete to hardened concrete, or for bonding miscellaneous materials such as metals.
IV	Epoxy adhesive suitable for use with clean concrete or mortar sand in the preparation of an epoxy mortar.
V	Epoxy adhesive suitable for repairing cracks in concrete by intrusion grouting.
VI	Epoxy adhesive to be used as a complete application or as a component in the application of a skid resistant or protective coating on hardened Portland cement concrete or asphaltic concrete.
VIII	Epoxy adhesive used for anchors and dowel bar implants. This epoxy adhesive shall either be packaged in a two component cartridge with a mixing nozzle that thoroughly mixes the two components as they are dispensed [the nozzle shall be a minimum of 8 in (200 mm) long], or be machine mixed to the proper ratio.

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Type (I-R, I-S, II, III, IV, V, VI, or VIII), Epoxy Resin Adhesive complying with the current requirements of Subsection 886.2.01 of the Georgia Department of Transportation Specifications.

Include remainder of Warranty from Section II-C.

IV. (QPL 18) Special Protective Coatings

Special Protective Coatings shall be either 1P or 2P and shall conform to the current requirements of Subsection 870.2.05.A of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1. Initial Evaluation

1-P, a minimum of 1gal (3.8 L)

2-P, one kit (2 components)

2. Annual Evaluation Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Special Surface Coating for concrete meeting the current requirements of Subsection 870.2.05.A of the Georgia Department of Transportation Specifications.

Include remainder of Warranty from Section II-C.

V. (QPL 19) Bar Supports

Bar supports shall meet the current requirements of Subsection 511.2.A of the Georgia Department of Transportation Specifications. The manufacturer or vendor shall furnish the Contractor with an invoice that will assure the field engineer of the manufacturer, type, size, and quantity of bar supports.

A. Sample Requirements

1. Initial Evaluation

1 of each type support and 1 of each type of material

2. Annual Evaluation

1 of each type support and 1 of each type of material

B. Warranty Letter

"(Company Name) warrants that bar supports furnished to State of Georgia projects will be in accordance with the current requirements of Subsection 511.2.A of the Georgia Department of Transportation Specifications." Include remainder of Warranty from Section II-C.

VI. (QPL 20) Preformed Joint Fillers

Preformed Joint Fillers shall meet the current requirements of Subsection 833.2.01, "Preformed Joint Filler" or Subsection 833.2.10, "Preformed Foam Joint Filler" of the Georgia Department of Transportation Specifications. The manufacture or vendor shall furnish the Contractor with an invoice that will assure the field engineer of the manufacturer, type, size, and quantity of joint fillers.

A. Sample Requirements

1. Initial Evaluation

$$3 \text{ ft}^2 (0.3 \text{ m}^2)$$

2. Annual Evaluation

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a preformed joint filler meeting the current requirements of Subsection 833.2.01, "Preformed Joint

Filler" or Subsection 833.2.10, "Preformed Foam Joint Filler" of the Georgia Department of Transportation Specifications.

Include remainder of Warranty from <u>Section II-C</u>.

VII. (QPL 21) Joint Sealers and Gaskets for Concrete Pipe

Pipe Joint Sealers and Gaskets for Concrete Pipe shall meet the appropriate current requirements of Section 848 of the Georgia Department of Transportation Specifications. These will be classified as <u>Rubber Type Gaskets</u> and <u>O-Ring Gaskets</u> (848.2.01), <u>Bituminous Plastic Cement</u> (848.2.05), or <u>Preformed Plastic Gaskets</u> (848.2.06).

A. Sample Requirements

Samples shall be according to the following for each type gasket and or sealer:

- 1. Rubber-Type Gasket Joints- one gasket of each size
- 2. O-Ring Gaskets one gasket of each size
- 3. Bituminous Plastic Cement 1 gal (3.8 L)
- 4. Preformed Plastic Gaskets 6 ft (1.8 m)

B. Warranty Letter

"This is to warrant that the <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Pipe Joint <u>(Sealer / Gasket)</u> meeting the current requirements of Subsection 848.2.01 or Subsection 848.2.06 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

VIII. (QPL 22) Waterproofing Membrane Material

Waterproofing Membrane Material for Bridge Decks, Pavement Joints and Cracks, and Retaining Wall Joints shall meet the current requirements of Section 888 of the Georgia Department of Transportation Specifications. These will be classified as either Waterproofing Membrane for Bridge Decks (888.2.01), Water Proofing Membrane for Concrete Paving Joints and Cracks (888.2.02), or Waterproofing Membrane for Retaining Wall Joints (888.2.03). The Manufacturer shall recommend the surface preparation, application, curing, and other pertinent information.

A. Sample Requirements

1. Initial Evaluation

4 ft² (0.4 m²) and manufacturer recommended primer sample

2. Annual Evaluation

4 ft² (0.4 m²) and manufacturer recommended primer sample

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Waterproofing Membrane Material meeting the current requirements of Subsection 888.2.01, Subsection 888.2.02, Subsection 888.2.03 of the Georgia Department of Transportation Specifications.

Include remainder of Warranty from Section II-C.

IX. (QPL 24) Bituminous Treated Roving

Bituminous Treated Roving shall be applied on planted slopes, ditches, waterways, and other areas to prevent erosion. The roving shall be glass fibers or fibrillated polypropylene yarn meeting the current requirements of Subsection 715.2 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1 Initial EvaluationOne package

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product (<u>Product Trade Name</u>) as manufactured and sold by (<u>Company Name</u>) is a (<u>Fiber Glass or Fibrillated Polypropylene</u>) <u>Yarn Roving</u> meeting the current requirements of Subsection 715.2 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

X. (QPL 25) Wood Fiber Mulch

Wood Fiber Mulch used in seeding shall meet the current requirements of Subsection 718.2 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1. Initial Evaluation

One bale

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is Wood Fiber Mulch meeting the current requirements of Subsection 718.2 of the Georgia Department of Transportation Specifications

Include remainder of Warranty from Section II-C.

XI. (QPL 27) Rapid Setting Patching Material

Rapid Setting Patching Materials shall meet the current requirements of Section 934 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1. Initial Evaluation

For Type I, II, and III, submit a 50 lb (22.68 kg) bag of material with specific instructions clearly labeled on the bag listing any additives or activators required by the Manufacturer.

For type IV and V, a one year evaluation is required.

2. Annual Evaluation

For Type I, II, and III, submit a 50 lb (22.68 kg) bag of material with specific instructions clearly labeled on the bag listing any additives or activators required by the Manufacturer.

For Type IV and V, submit a Warranty and IndependentLab Certification.

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Type (<u>I, II, III, IV, or V</u>), Class (<u>A or B</u>) Rapid Setting Patching Material meeting the current requirements of Section 934 of the Georgia Department of Transportation Specifications." In addition, the material will perform satisfactory in a field trial installation."

Include remainder of Warranty from Section II-C.

XII. (QPL 28) Filter Fabrics

Filter Fabrics for use beneath Rip-Rap Stone or behind retaining walls shall meet the current requirements of Subsection 881.2.05 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1. Initial Evaluation

1 yd² (0.84 m²) of each type

2. Annual Evaluation

1 yd² (0.84 m²) of each type

B. Warranty Letter

"This is to warrant that the product (<u>Product Trade Name</u>) as manufactured and sold by (<u>Company Name</u>) is a (<u>Non-Woven or Woven</u>) Filter Fabric meeting the current requirements of Subsection 881.2.05 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XIII. (QPL 29) Reflective Sheeting

Reflective Sheeting for signs shall meet the current requirements of Subsection 913.2.01 and/or Section 150.01.C of the Georgia Department of Transportation Specifications. The reflective sheeting types are per ASTM D4956-04 "type" designations.

A. Sample Requirements

1. Initial Evaluation

2 ft² (0.19 m²) of each type, class and color

2. Annual Evaluation

2 ft² (0.19 m²) of each type, class and color

B. Warranty Letter

"This is to warrant that all Reflective Sheeting manufactured and sold by <u>(Company Name)</u> for use on State of Georgia projects will meet the appropriate current requirements of Subsection 913.2.01 and/or Section 150.01.C of the Georgia Department of Transportation Specifications"

Include remainder of Warranty from Section II-C.

XIV. (QPL 31) Manhole Steps

Manhole Steps shall meet the current requirements of ASTM C-478.

A. Sample Requirements

1 Initial Evaluation

Three steps for each size submitted

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"<u>(Company Name)</u> warrants that Manhole Steps manufactured and sold under the trade name <u>(Product Trade Name)</u> will meet the current requirements of ASTM C-478."

Include remainder of Warranty from Section II-C.

XV. (QPL 32) Soil Sterilants

Soil Sterilants shall meet the current requirements of Section 725 of the Georgia Department of Transportation Specifications and must be certified by the Georgia Department of Agriculture.

A. Sample Requirements

1 Initial Evaluation 1 pt (475 ml)

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Soil Sterilant meeting the current requirements of Section 725 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XVI. (QPL 33) Tackifiers

Tackifiers shall be used in accordance with the current requirements of Subsection 700.3.05.B or 700.3.05.G of the Georgia Department of Transportation Specifications. Laboratory testing will be performed on tackifiers, and those passing will have a field trial installation.

A. Sample Requirements

1 Initial Evaluation1 qt (1 L) and a field test

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Tackifier for use under the current requirements of Subsection 700.3.05.B or 700.3.05.G of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XVII. (QPL 34) Work Zone, Traffic Control Devices

Work Zone Traffic Control Devices shall be crash tested under NCHRP Report 350 and approved for use by the Federal Highway Administration and meet the current requirements of Section 150 of the Georgia Department of Transportation Specifications. This QPL includes **Type III Barricades, Vertical Panels, and Portable Sign Systems**. These products are approved as systems and are not interchangeable unless approved by the <u>Office of Materials and Research</u>. Each device shall have identifying decal, logo, or manufacturer's stamp that clearly indicates that the device is NCHRP-350 compliant.

Approved Roll-up Signs are approved for use on all approved Portable Sign Stands. Roll-up sign reflective sheeting material shall be approved by the <u>Office of Materials and Research</u>. Approved sheeting for rigid sign blanks shall be shown on <u>QPL 29</u>, <u>"Reflective Sheeting"</u>.

A. Sample Requirements

Initial Evaluation
 NCHRP 350 report and FHWA approved letter

2. Annual Evaluation

Warranty

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a <u>(Type III Barricade or Vertical Panel or Portable Sign System)</u> that has been NCHRP 350 crash tested, approved for use on the National Highway System by the Federal Highway Administration and meets the current requirements of Section 150 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XVIII. (QPL 35) Drive-Type Galvanized Steel Sign Posts

Drive-Type Galvanized Steel Sign Posts shall meet the current requirements of Subsection 911.2.01 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

Initial EvaluationOne 4 ft (1.2 m) post of each type (1, 2, 3, 4, 5, 6, 7, 8, and 9)

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that all Drive-Type Galvanized Steel Sign Posts manufactured and sold by <u>(Company Name)</u> for use on State of Georgia projects will meet the appropriate current requirements of Subsection 911.2.01 of the Georgia Department of Transportation Specifications. I further warrant that all steel products shipped to Georgia Department of Transportation projects are made from domestic steel and iron and that no foreign billets are used directly in the manufacture of these products."

Include remainder of Warranty from Section II-C.

XIX. (QPL 36) Silt Fence Fabric and Type C Systems

Silt Fences shall meet the current requirements of Subsection 881.2.07, Section 171, and Section 894 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1. Initial Evaluation

$$3 \text{ yd}^2 (2.5 \text{ m}^2)$$

2. Annual Evaluation

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a <u>(Silt Fence Fabric meeting the current requirements of Subsection 881.2.07 / Silt Fence Type C System meeting the current requirements of Section 171 and Section 894) of the Georgia Department of Transportation Specifications."</u>

Include remainder of Warranty from Section II-C.

XX. (QPL 38) Epoxy Powders for Coating Reinforcing Bars and Plastic Coated Tie Wires

<u>Epoxy Powders for Coating Reinforcing Bars</u> shall meet the current requirements of Subsection 514.2.C and Subsection 853.2.08.B.2 of the Georgia Department of Transportation Specifications. The manufacturer shall submit documentation in accordance with Subsection 514.2.C and Subsection 853.2.08.B.2.

A. Sample Requirements

1. Initial Evaluation

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4 coated #6 (#19M) bars, 4 ft (1.2 m) long
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2. Annual Evaluation

4 coated #6 (#19M) bars, 4 ft (1.2 m) long

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is an Epoxy Powder meeting the current requirements of Subsection 514.2.C and 853.2.08.B.2 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

<u>Plastic Coated Tie Wires</u> shall meet the current requirements of Subsection 514.2.B.2 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1. Initial Evaluation

6 precut units or a minimum of 6 ft (1.8 m)

2. Annual Evaluation

6 precut units or a minimum of 6 ft (1.8 m)

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Plastic Coated Tie Wire meeting the current requirements of Subsection 514.2.B.2 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XXI. (QPL 40) Pavement Reinforcement Fabric

Pavement Reinforcement Fabric shall meet the current requirements of Subsection 881.2.06 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1. Initial Evaluation

$$3 \text{ yd}^2 (2.5 \text{ m}^2)$$

2. Annual Evaluation

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Type <u>(I or II)</u> Pavement Reinforcement Fabric meeting the current requirements of Subsection 881.2.06 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

High Strength Pavement Reinforcement Fabric shall meet the current requirements of Subsection 881.2.06 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1. Initial Evaluation

2. Annual Evaluation

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a High Strength Pavement Reinforcement Fabric meeting the current requirements of Subsection 881.2.06 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XXII. (QPL 46) Traffic markings

Polyurea Traffic Markings shall meet the current requirements of Subsection 652 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

Initial Evaluation
 1 pint (475 ml) of each component
 Annual Evaluation
 1 pint (475 ml) of each component

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Polyurea Traffic Marking meeting the current requirements of Section 652 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XXIII. (QPL 47) Geocomposite Wall Drains

Geocomposite Wall Drains shall be evaluated by the Office of Materials and Research before inclusion in the Qualified Products Manual. The non-woven fabric used on the medium shall meet the current requirements of Subsection 881.2.05 of the Georgia Department of Transportation Specifications. The fabric shall be an approved fabric and must be listed on QPL 28. The draining medium shall provide free draining while withstanding earth pressures against the retaining wall. The medium with fabric attached shall not have more than 25 percent deflection at 30 psi (207 kPa) when tested in the laboratory.

A. Sample Requirements

1. Initial Evaluation

2 yd² (1.7 m²) of medium with fabric attached and 2 yd² (1.7 m²) of fabric that has not been attached.

2. Annual Evaluation

2 yd² (1.7 m²) of medium with fabric attached and 2 yd² (1.7 m²) of fabric that has not been attached.

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Geocomposite Wall Drain for Retaining Walls. The non-woven fabric used meets the current requirements of Subsection 881.2.05 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XXIV. (QPL 49) Permanent Soil Reinforcing Mat

Permanent Soil Reinforcing Mats shall meet the current requirements of Section 710 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1 Initial Evaluation

$$2 \text{ yd}^2 (1.7 \text{ m}^2)$$

2. Annual Evaluation

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Permanent Soil Reinforcing Mat meeting the current requirements of Section 710 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XXV. (QPL 58) Filter Fabric Adhesives

Filter Fabric Adhesives used for sticking Filter Fabrics to Mechanically Stabilized Embankment Retaining Wall Panels shall meet the current requirements of Section 626 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1 Initial Evaluation

1 qt (1 L) or cartridge

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is an adhesive satisfying the current requirements of Section 626 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XXVI. (QPL 62) Organic and Synthetic Material Fiber Blanket

Coconut, Excelsior, Straw, Synthetic or Wood Fiber Blankets placed over grassed areas shall meet the current requirements of Section 713 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1. Initial Evaluation

24 ft² (2.2 m²), one roll, or one bale

2. Annual Evaluation

24 ft² (2.2 m²), one roll, or one bale

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a <u>(Coconut, Excelsior, Straw, Synthetic, or Wood -- Type I or II)</u> Material Fiber Blanket meeting the current requirements of Section 713 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XXVII. (QPL 63) Ground Mounted Breakaway Sign Supports

Ground Mounted Breakaway Sign Supports consisting of a sign post and base assembly shall meet the current requirements of Subsection 911.2.06 of the Georgia Department of Transportation Specifications. The manufacturer is to submit Design Data and FHWA approval along with the following preliminary samples.

A. Sample Requirements

1 Initial Evaluation

1 unit of each type

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is Ground Mounted Breakaway Sign Support meeting the current requirements of Subsection 911.2.06 of the Georgia Department of Transportation Specifications. I further warrant that all steel products shipped to Georgia Department of Transportation projects are made from domestic steel and iron and that no foreign billets are used directly in the manufacture of these products."

Include remainder of Warranty from Section II-C.

XXVIII. (QPL 66) Silicone Joint Sealant

Silicone Joint Sealant shall meet the current requirements of Subsection 833.2.06 of the Georgia Department of Transportation Specifications. The vendor shall provide the contractor with an invoice that will assure the Engineer of the manufacturer, type, size and quantity of silicone sealant.

A. Sample Requirements

- 1 Initial Evaluation2 cartridges and a 2 year field evaluation
- 2. Annual Evaluation 2 cartridges, Warranty letter, and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Silicone Joint Sealant meeting the current requirements of Subsection 833.2.06 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XXIX. (QPL 68) Low Dusting Blast Cleaning Abrasives

Low Dusting Blast Cleaning Abrasives shall meet the current requirements of Section 804 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1. Initial Evaluation

2 lbs (1kg)

2. Annual Evaluation

2 lbs (1kg)

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Low Dusting Blast Cleaning Abrasive meeting the current requirements of Section 804 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XXX. (QPL 69) Flexible Delineator Posts

Flexible Delineator Posts shall meet the current requirements of Subsection 911.2.04.A.7 of the Georgia Department of Transportation Specifications and Detail 9030Cof the Georgia Department of Transportation Standards.

A. Sample Requirements

1 Initial EvaluationOne of each type

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Flexible Delineator Post meeting the current requirements of Subsection 911.2.04.A.7 of the Georgia Department of Transportation Specifications and Detail 9030C of the Georgia Department of Transportation Standard."

Include remainder of Warranty from Section II-C.

XXXI. (QPL 72) Guy Wire/Span Cable

Guy Wire/Span Cable shall meet the current requirements of Subsection 915.2.02 of the Georgia Department of Transportation Specifications. This specification requires that the Guy Wire/Span Cable meet the requirements of ASTM A 475, Class A, Siemens-Martin Grade.

A. Sample Requirements

1. Initial evaluation

2 specimens 36 in (914 mm) of ¼ in (6.4 mm) and 3/8 in (9.5 mm) cable and Independent Lab Certification.

2. Annual Evaluation

2 specimens 36 in (914 mm) of ¼ in (6.4 mm) and 3/8 in (9.5 mm) cable and Independent Lab Certification.

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Guy Wire / Span Cable meeting the current requirements of Subsection 915.2.02 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XXXII. (QPL 73) Waterborne Bridge Paint Systems

Waterborne Bridge Paint Manufacturers shall provide systems that meet the current requirements of Subsection 870.2.01 of the Georgia Department of Transportation Specifications. The use of a given manufacturers primer requires the use of the same manufacturers intermediate and topcoats.

A. Sample Requirements

1 Initial Evaluation

1 qt (1 L) each

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Waterborne Bridge Paint System meeting the current requirements of Subsection 870.2.01of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section IIC.

XXXIII. (QPL 74) Preformed Plastic Pavement Markings

Preformed Plastic Markings shall meet the current requirements of Section 657 or Section 659 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1. Initial Evaluation

10 ft (3 m) of each type

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Preformed Plastic Marking meeting the current requirements of Section 657 or Section 659 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XXXIV. (QPL 75) Sealant for Inductive Loops

Sealant for Inductive Loops shall meet the current requirements of Subsection 833.2.09 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1. Initial Evaluation

1 qt (1 L) or 2 cartridges

2. Annual Evaluation

1 qt (1 L) or 2 cartridges

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Polyurethane Sealant for Inductive Loops meeting the current requirements of Subsection 833.2.09 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XXXV. (QPL 76) Raised Pavement Markers and Channel Markers

Raised pavement markers and channel markers shall meet the current requirement of Section 919 of the Georgia Department of Transportation Specifications and Detail T-15C of the Georgia Department of Transportation Standards.

A. Sample Requirements

1. Initial Evaluation

Raised Retro-Reflective Pavement Markers (Type 1, 2, 3, 11, 12, and 13) — 50 of each type Flexible Reflective Markers (Type 14 and 15) – 50 of each type Ceramic Pavement Markers (Type 4, 5, 6, 7, and 8) – 5 of each type Channel Pavement Markers (Type 9 and 10) -- 5 of each type

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a <u>(Raised Retro-Reflective Pavement Marker, Flexible Reflective Marker, Ceramic Pavement Marker, or Channel Pavement Marker)</u> meeting the current requirements of Section 919 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XXXVI. (QPL 78) Traffic Signal Pull and Junction Boxes

Traffic Signal Pull and Junction Boxes shall meet the current requirements of the Special Provision for Subsection 925.2.29 of the Georgia Department of Transportation Specifications. The Department will only evaluate / lab test Traffic Signal Pull and Junction Boxes with a maximum overall width of 24 in (600 mm). Larger Traffic Signal Pull and Junction Boxes will be evaluated by Independent Lab Certification.

A. Sample Requirements

1 Initial Evaluation

1 of each size Traffic Signal Pull and Junction Box. **Maximum box width, 24 in (600 mm) overall Warranty and Independent lab Certification for all boxes over 24 in width.

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name and Size)</u> as manufactured and sold by <u>(Company Name)</u> is a Traffic Signal <u>(Pull or Junction)</u> Box satisfying the current requirements of the Special Provision for Subsection 925.2.29 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XXXVII. (QPL 79) Portable Arrow Boards

Portable Arrow Boards shall meet the current requirements of The Manual on Uniform Traffic Control Devices for Portable Arrow Boards, Section 6F.

A. Sample Requirements

1 Initial Evaluation

1 sign for 30-day evaluation period

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Portable Arrow Board which meets the current requirements the Manual on Uniform Traffic Control Devices, Section 6F."

Include remainder of Warranty from Section II-C.

XXXVIII. (QPL 82) Portable Changeable Message Signs

Portable Changeable Message Signs shall meet the <u>Section 6F</u> of the Manual on Uniform Traffic Control Devices and Section 632 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1 Initial Evaluation

1 sign for 30-day evaluation period

2. Annual Evaluation

Warranty and Notice

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is a Portable Changeable Message Board which meets the <u>Section 6F</u> of the Manual on Uniform Traffic Control Devices and Section 632 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

C. Notice Letter

"This letter will serve as notice that the <u>(Product Trade Name)</u> noted in the accompanying correspondence are the same as those originally evaluated and certified by the Georgia Department of Transportation/<u>Office of Materials and Research</u>. There have been no substantial changes in the component parts or the manufacturing process."

XXXIX. (QPL 83) Center Mount Reflector Delineators

Center Mount Reflector Delineators shall meet the current requirement of Section 916 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1 Initial Evaluation50 of each type and color

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product ____ (Product Trade Name) __ as manufactured and sold by ___ (Company Name) is Center Mount Reflector Delineator meeting the current requirements of Section 916 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XL. (QPL 84) Anionic Polyacrylamide Materials

Anionic Polyacrylamide Materials shall meet the current requirements of Section 895 of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1 Initial Evaluation

1 pt (475 ml) of each emulsion and 4 oz (113 g) of each powder

2. Annual Evaluation

Warranty and Independent Lab Certification

B. Warranty Letter

"This is to warrant that the product <u>(Product Trade Name)</u> as manufactured and sold by <u>(Company Name)</u> is an Anionic Polyacrylamide meeting the current requirements of Section 895 of the Georgia Department of Transportation Specifications."

Include remainder of Warranty from Section II-C.

XLI. (QPL 87) Detectable Warning Surfaces

Detectable Warning Surface Materials shall meet the current requirements of the Georgia Department of Transportation Specifications Construction Standards and Details Drawings A3 and A4.

A. Sample Requirements

1 Initial Evaluation

1 sample of each product

2. Annual Evaluation

Warranty and Independent Lab Certification

В.	Warrantv	Letter
D.	vvallalitv	rerrer

"This is to warrant that the product (Product Trade Name	e) as manufactured and sold by
(Company Name) is a Detectable Warning Surface meeti	ng the current requirements of the Georgia
Department of Transportation Specifications Construction	Standards and Details Drawings A3 and A4."
Include remainder of Warranty from <u>Section II-C</u> .	
	<u></u>
	Georgene M. Geary, P.E.
	State Materials and Research Engineer
	·
	Gregory T. Mayo , P.E.
	Director of Construction

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